

March 12, 2018

RE: Avery Dennison STD, Bldg. 5

Notice of Violation (NOV)

Air Permit Lake County

DAPC Facility ID # 0243111362 Division of Air Pollution Control

CERTIFIED MAIL

91 7199 9991 7037 9803 7004

Ms. Mary Rossoll Avery Dennison STD, Bldg. 5 250 Chester St., Bldg.5 Painesville, OH 44077

Subject: Notice of Violation/Resolution of Violation

Dear Ms. Rossoll:

On February 15, 2018, Avery Dennison STD, Building 5 (Avery) notified the Ohio EPA's Office of Environmental Response (OER) of a release from K016 (the I-5 Coater) due to the coating line operating in bypass mode while running solvent based products. On February 22, 2018, the Ohio EPA received a malfunction report, with the details of the event.

Listed below are "Findings" based upon Ohio EPA's observations and conversations with facility personnel. The "Findings" are followed by "Violation(s)" (if applicable) and the Resolution of Violation addressing the stated findings and violations.

Findings

On February 15, 2018 at 1:04 PM the OER was notified by Avery of a release from emission unit K016 (the I-5 Coater). OER immediately notified the Division of Air Pollution Control (DAPC) and a representative from DAPC contacted Avery to get information regarding the event. The facility was conducting an upgrade of the LEL monitoring system which included updated programming to the I-5 coater logic system through a third party, resulting in the improper operation. On February 14, 2018, while running solvent based products, the coater ran while in bypass mode causing emissions to be vented directly to the atmosphere. The coater ran under this scenario intermittently from 2:35 PM to approximately 8:09 PM at less than target speeds on trial material. At 9:58 PM, the coater changed over to run a spec according to the schedule, at a rate still less than target intermittently until 11:51 PM. The coater then ran continuously until it was shut down at 9:23 AM on February 15, 2018.

The update of the logic programing was based on old equipment configuration, which caused dampers to remain open to the atmosphere during start-up of a solvent based product coating application. The open dampers allowed for solvent laden air to bypass the regenerative thermal oxidizer (RTO). The coater is designed to shut down during improper direction of gas flow,

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which did not occur due to the malfunction of the control logic. Redundant LEL detection was maintained in the exhaust duct resulting in a visible, but not audible warning. Avery did not observe this warning.

On February 16, 2018, the facility reported the initial intermittent trial material ran, venting to atmosphere, for approximately 221 minutes, with a VOC release of 1,001 lbs. The next run duration was approximately 606 minutes, with a VOC release of 5,886 lbs. Based on calculations submitted by Avery, it has been determined that the toluene released during the malfunction period from February 14, 2018 at 2:35 PM until February 15, 2018 at 9:23 AM, was 5,366 pounds.

Based off the information provided for the malfunction, the result is the following violations of Ohio's Air Pollution Control laws and Avery's permit terms and conditions:

Note: all violations of emissions limits are also violations of ORC 3704.05(A), all violations of the terms of any of Avery's Permits-to-install (PTIs) are also violations of ORC 3704.05(C), and all violations of the terms of Avery's Title V permit are also violations of ORC 3704.05(J)(2) as outlined below:

ORC 3704.05(A): "No person shall cause, permit, or allow emission of an air contaminant in violation of any rule adopted by the director of environmental protection...",

ORC 3704.05(C): "No person who is the holder of a permit issued under division (F) or (G) of section 3704.03 of the Revised Code shall violate any of its terms or conditions."

ORC 3704.05(J)(2): "No person shall...violate any applicable requirement of a Title V permit or any permit condition..."

- 1. Permit terms and conditions of Title V permit P0085050, section C.2.b)(1)a and PTI 02-7206.: "24.0 pounds of VOC per hour from the coating line, including cleanup, as a daily average"
 - (a) In an email received by this office on March 1, 2018, Avery reported the daily average for the two days during the malfunction were as follows: On February 14, 2017 the daily average was 419 pounds of VOC per hour and on February 15, 2017 the daily average was 516 pounds of VOC per hour. Both days during the malfunction, exceed the emission limit of "24.0 pounds of VOC per hour from the coating line, including cleanup, as a daily average"
- 2. Permit terms and conditions of Title V permit P0085050, section C.2.b)(1)b and PTI 02-7206 Additional Special Terms and Conditions: "98.5% overall VOC reduction by weight (i.e., 100% capture efficiency and 98.5% destruction efficiency) for all solvent based coatings."
 - (a) From February 14, 2018 at 2:35 PM until February 15, 2018 at 9:23 AM emission unit K016 (I-5 Coater) operated in bypass while running solvent based products. Emission

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unit K016 ran solvent based coatings and did not reduce the overall VOC 98.5% by weight, through use of the RTO.

- 3. Permit terms and conditions of Title V permit P0085050, section C.2.c)(3): "This emissions unit shall be vented to the thermal oxidizers during all solvent based coating operations except when employing only coatings that comply with the VOC content limits contained in OAC rule 3745-21-09(F) and 40 CFR Part 60 Subpart RR."
 - (a) From February 14, 2018 at 2:35 PM until February 15,2018 at 9:23 AM, emission unit K016 ran solvent based coatings and did not vent the emissions to the thermal oxidizer.
- 4. Permit terms and conditions of Title V permit P0085050, section C.2.c)(5): "During the required use of the thermal oxidizers, the permittee shall ensure that any inline bypass that could divert solvent laden air from each coating applicator to the ambient air is closed...any device in the bypass which indicates a VOC concentration or temperature change or other parameter in order to alert the permittee of inappropriate bypass use, shall be operated and maintained according to the manufacturer's recommendations, instructions and operating manuals."
 - (a) On February 15, 2018 at 1:04 PM the Ohio EPA was notified by Avery of a malfunction of emission unit K016 (I-5 Coater), where an open damper sent solvent laden air to bypass to the ambient air. Exhaust ducts maintained redundant LEL detection resulting in a visual alarm which Avery did not observe. The audible alarm warning of the bypass of solvent laden air faltered due to this malfunction.
- 5. Permit terms and conditions of Title V permit P0085050, section C.2.c)(7): "The damper monitoring system (DMS) ... shall be operated and maintained according to the manufacturer's recommendations, instructions and operating manuals"
 - (a) Due to a control logic update malfunction, the DMS did not properly operate from February 14, 2018 at 2:35 PM until February 15, 2018 at 9:23 AM.
- 6. OAC Rule 3745-21-09(F)(2)(a): "......Any owner or operator of a paper coating line with potential emissions that are equal to or greater than 25.0 tons per year of VOC before the application of capture and control devices shall ... Employ a control system in order to reduce VOC emissions from the paper coating line by at least ninety per cent or maintain a maximum VOC outlet concentration of twenty ppmv on a dry basis, whichever is less stringent."

Permit terms and conditions of Title V permit P0085050 section C.2.b)e.: "For all solvent based coatings employed in the adhesive coater and/or primer, at least 90% overall reduction of VOC, by weight."

(a) From February 14, 2018 at 2:35 PM until February 15,2018 at 9:23 AM, emission unit K016 ran solvent based coatings that did not meet the control efficiency specified above. The facility did not meet the coating VOC content limit (0.067 lb VOC/ lb of coating for pressure sensitive tape and label surface coatings or 0.08 lb VOC / lb of coating for all Avery Dennison STD, Bldg. 5 March 12, 2018 Page 4 of 4

other pressure surface coatings and/or primer), for coating not required to be vented to the thermal oxidizer.

Resolution of Violation

On February 15, 2018 Avery updated the logic programming to correct the issue causing the malfunction. Later in the afternoon the team discussed a plan to ensure the dampers were properly functioning. The functionality check was performed based on the plan in the early evening using calibration gases and visual checks to determine that the dampers were properly functioning. All dampers were confirmed to be properly operating, thus the coating line came back online around 10 pm on February 15, 2018.

Based on the information provided, it appears the facility had completed the necessary corrective actions to bring the facility/emissions units into compliance, therefore, the referenced violation(s) are considered resolved.

Please note that this does not preclude the Director from seeking administrative or civil penalties pursuant to ORC Section 3704.06. The decision on whether to pursue or decline to pursue such penalties regarding these violations is dependent on several factors, one of which is the company's future compliance with Ohio EPA regulatory requirements.

Should you have any questions, please contact me at (330) 963-1273, or by e-mail at oliva.kinney@epa.ohio.gov.

Sincerely,

Olivia Kinney

Environmental Specialist

Division of Air Pollution Control

OK/ams

ec: Daniel Jones Avery Dennison

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